

# ABSTRACT OF THE DISCLOSURE

Method and apparatus for measuring a water concentration in ammonia, comprising using ammonia having a water concentration of 10 ppm or less as a reference gas, introducing the ammonia at a constant flow rate into a multi-reflection long optical path gas cell, and measuring infrared absorption intensity of water at at least one measurement wave number in the range of from 3,500 to 4,000  $\text{cm}^{-1}$ , from 2,600 to 3,100  $\text{cm}^{-1}$ , or from 1,900 to 2,400  $\text{cm}^{-1}$  at which infrared absorptions of ammonia and water do not overlap.

According to the present invention, analysis of water in a low concentration range of 10 ppm or less in ammonia gas and liquefied ammonia can be performed in a simple and convenient manner.